Title

THE SCOPE AND IMPLICATIONS OF MORALS NOT KNOWLEDGE: with Mark Harris, "'The People of This Country Have Had Enough of Experts': In Defense of the 'Elites' of the Science-and-Religion Debate"; Fern Elsdon-Baker, "In Defense of Publics: Projection, Bia...

Journal

Zygon, 54(3)

ISSN

0591-2385

Author

Evans, JH

Publication Date

2019

DOI

10.1111/zygo.12541

Peer reviewed

The Scope and Implications of “Morals Not Knowledge”

John H. Evans, University of California, San Diego

I greatly appreciate the opportunity provided by the editor of Zygon to further develop the ideas in my book in conversation with the four critical commentaries. It is an honor to have one’s work focused upon so intently, and I greatly appreciate the time and effort of the critics. The book was quite intentionally written as a provocation, an attempt at agenda-setting, and as a call for changing the thinking of the entire religion and science academic community. In my previous writings I have kept close to the data, allowing myself at best mid-level conclusions, but this book is a foray into the abstraction and inevitable lack of precision required for high level generalization. I hope that it continues to be generative of debate.

Before engaging the thoughtful comments of my critics, I briefly summarize what I would have said the book was about before I read the critics reviews. As noted, the book is called *Morals Not Knowledge: Recasting the Contemporary U.S. Conflict Between Religion and Science*. If interested in reading it, it is available for sale in standard paper form, but has also been made available by the University of California press for free download in multiple formats. The free download is best found through a google search of the full title.

My goal in the book is try to dismantle the myth that there is a conflict

between religion and science over methods of knowing the natural world for the American public. I show that in actuality, probably starting in the 1960s, there has been a conflict in the U.S. between religion and science over morality. I spend many pages showing that the participants in the religion and science debate – the "elites" who are primarily academics – portray the conflict they are trying to dismantle as about knowledge, and in portraying the relationship as concerning knowledge, inadvertently perpetuate the knowledge conflict myth.

I describe three types of relationships between religion and science. The first is over systemic knowledge, with religion and science as hierarchically organized systems of deductive justification for knowledge claims about the natural world, the 16th century origins of which Peter Harrison has so effectively explained. (Harrison 2015) This is where science finds the age of the earth through observation and reason, and religion through sacred texts and faith. If this is what is happening in the public, then scientists should not be able to believe any religion, and religious people should not believe any science. The book shows that this model is not found in the public.

This sort of deductive logic from first principles is the relationship held by academics. I spend a few chapters in the book showing that while trying to undermine the idea of conflict, elites in the religion and science debate reinforce the idea that there are competing deductive systems of religion

and science that need to be synthesized. I am an equal opportunity critic in that my home discipline of sociology is probably the worst offender. Of those disciplines making claims about what people do or have done, Sociology really has no excuse because it focuses on the present. History has an excuse because, I would hypothesize, the discussion about religion and science by the general public more than 50 years ago may well have concerned systemic knowledge of nature. Elites who are not describing but advocating – mostly theologians and philosophers – should advocate for the systemic knowledge perspective because that is their job. After all, the definition of a theologian (at least in sociology) is a person who synthesizes and makes religious ideas coherent. The problem comes when it is implied that the systemic knowledge perspective of the academics is shared by the public.

The second relationship concerns what I call "propositional belief," and it is also about knowledge, but knowledge claims that do not presume logical justification or deduction from higher level beliefs. One such propositional belief could be "the earth is 6,000 years old." With an unconnected belief about the natural world such as this, someone could believe all other scientific claims and be a practicing scientist. An academic would be fired for such an "illogical" stance, but I argue that this is how the few fact disputes between religion and science operate for ordinary religious people. Thus, conservative evangelicals have no problem saying that science is

wrong that the earth is ancient, while simultaneously believing all scientific claims about how electrons operate. Most importantly, if this is the knowledge conflict that exists, it is much, much less socially consequential, because it does not limit shared understanding of the world for the vast majority of scientific claims. The book has a chapter demonstrating that the religious public in the U.S. is not engaged in systemic knowledge conflict with science, but a few religious groups are in propositional belief conflict with science over a few fact claims (e.g. human evolution).

The third relationship, and most instances of contemporary conflict, concern morality. While science portrays itself as the morally neutral investigator of nature, that is not how science is seen by the public. More importantly, science is seen as promoting morals that are at odds with religion in both a narrow sense (e.g. embryonic stem cell research), and a more expansive sense (e.g. the periodic attempts to create a religion of science to provide meaning for society). The possibility of moral conflict is largely ignored in the elite academic religion and science literature. It is discussed with religion and science conflicts from the mid-19th century forward, such as the controversies over Darwin, but I argue in the book that at least American religion changed by the mid-20th century to not concern knowledge claims about the natural world at all. At the same time, science started conducting research into territory long thought to be “religious,” primarily the nature of the human body, reproduction and “life.” To

understand the relationship between religion and science in the contemporary world, and among ordinary religious people, we have to examine morality, not knowledge of the natural world.

The editors have selected critics from an extremely wide range of perspectives – from my home discipline of sociology (Ecklund and her colleagues), theology and science (Harris), science studies (Elsdon-Baker) and communication/rhetoric (Crick). Since there are therefore few common critiques, I largely respond in turn while identifying commonalities as I go.

ARE MY CLAIMS GENERALIZABLE?

I start with my most comfortable home territory. Sociologists Ecklund, Mehta and Bolger raise four cautions about the limitations of the claims that were the result of data and analysis limitations. What Ecklund and her colleagues summarize as not attending to the voices of minority Christians and religious minorities are variants of the same issue, and both are the result of the fact that the book is trying to make a statement about the people in the U.S. through the use of nationally-representative surveys.

Social science research design has a fundamental tension. If one wants to make a statement about "the population of the U.S.," as I attempt to do in my book, one is forced to examine people in the proportions they exist in the larger population. Therefore, racial and religious minorities are part of that generalization, but the analyst cannot examine them separately

because there are too few cases. For example, Muslims are about 1% of the population in the U.S., so in a typical representative survey of 1600 people there will be 16 Muslims – far, far too few to make any claims about. So, my generalizations remain accurate, they just blur over the distinctiveness of any particular group. I should note Ecklund and her colleagues are not contesting this, I am just making this point for clarity for the interdisciplinary reader. I should also add that the book limits its claims about the public to the U.S., although I do touch on elites from the broader Anglophone world because they share a field of discourse (as demonstrated by the existence of this very journal).

Their question is then whether my generalization can be used to describe each sub-group in the U.S. Imagine I made a generalization that the residents of the American deep south are supporters of President Trump, but we could ask whether that generalization fits the members of the Democratic club of Mobile, Alabama. So, my first answer is that I do not know if my generalization would be an accurate depiction of racial or religious minorities within the U.S., but I want to encourage someone to try to find out. What would be required is to focus on those groups, such as conducting an in-depth interview study of African American congregations, which is the data that Ecklund and her colleagues are referencing.

There are two sets of claims I make that may or may not be generalizable. The first is that religious people are generally not in systemic

knowledge conflict with science, but may have a few fact claims that they disagree about, and that any conflict is largely about morality. From what I know about racial minorities in the U.S. from reading other studies, including those from Ecklund and her colleagues (Tinsley, Prickett and Ecklund 2019), I would hypothesize that my generalization does fit. For example, I do not think that African Americans have any more of a system of religious knowledge than do white people, and as Ecklund and her colleagues describe, if anything African Americans have more reason to be in moral conflict with science. African Americans have been on the losing end of "scientific" claims about race, have been secretly experimented upon by scientists and much else that would lead this group to be suspicious of the morality of scientists.

I am less sure that religious minorities fit my generalization. Religious minorities in the U.S. each comprise 1% of the population or less. From Ecklund's new book on the religious views of scientists across the world, I would speculate that the entire concept of "religion vs. science," concerning knowledge or morality, is largely a Jewish and Christian concern. For example, I doubt my generalizations fit the less than 1% of the U.S. public who are Hindu. (Ecklund et al. 2019)

The other question of "fit' they raise is whether any of the substantive moral concerns about science would be different for racial and religious minorities than they are for white Christians of various types. I would say,

absolutely. Again, someone would have to do a case study of each religious tradition, but we do know, for example, that Jews view science quite differently than do Christians (Efron 2018). As Ecklund and her colleagues note, concerns about science in the Islamic public, at least in Europe, are ultimately about moral boundary drawing with the white Christian population, not about knowledge per se.

Ecklund and her colleagues' fourth point is about the difference between scientific elites (like those at research universities who are interviewed for the media) and regular citizens who are scientists but who have no particular power for influencing other's views. In general, non-elite scientists are more like all other non-elites when it comes to religious practice. I think Ecklund and I both have in mind a chemist who works at a perfume company designing scents. I hope I was clear in the book that I do not consider all scientists to be elites, but rather I was talking about the views of elites who are scientists.

My book is primarily about what ordinary religious people in the U.S. think about science. It is largely unknown where the public gets its view of what science "is," what its claims are, and in particular what its moral stance is. Is "science" for the average citizen in the U.S. represented by Bill Nye "the Science Guy," or celebrity physicist Neil deGrasse Tyson, or by their high school biology teacher? Ecklund and her colleagues remind us that this question is important for any future work in this area.

Finally, this set of critics is correct that I measure effects at an individual level and largely assume the community mechanisms that cause these effects. Examining religious moral communities, presumably through ethnography or an in-depth interview study of a congregation, would show how particular religious beliefs and practices form particular moral views. To take a hypothetical, I have shown elsewhere that liberal Protestants are opposed to the group-level eugenics implied by many reproductive genetic technologies (Evans 2010, Ch.5) What sort of practices would produce this particular moral vision? At least by the 1960s U.S. liberal Protestant children – and probably other Christians – would sing a song in front of the congregation whose first words were "Jesus loves the little children; all the children of the world; red, brown, yellow, black and white; they are precious in his sight; Jesus loves the little children of the world." This moral message of the equal value of all humans is undoubtedly burned into the consciousness of Christians from that era, whether or not they could ever identify the location in the Bible or theological concepts that supports this view. If we really would want to know how religious beliefs and practices translate into moral views (which could conflict with science), similar in-depth research would be required.

Ecklund and her colleagues effectively identify a large group of research projects that are required to see which sub-groups in the U.S. population actually fit with my generalization, and to examine the detailed

implications of my claims. I know we share the hope that social scientists will take up these projects.

DO ELITES MAKE SYSTEMIC KNOWLEDGE CLAIMS?

Fern Elsdon-Baker is primarily concerned with the extent to which elites actually use what I call systemic knowledge, and if they do, why they do. As a high level clarification, I should note that any empirical claim I make should be prefaced by the words "tend to." That is, I would not say that all academics always use systemic knowledge and in its ideal form. Rather, they tend to, more so than do ordinary people. Therefore, to perhaps muddle my metaphor beyond all usefulness, even the analytic philosopher's pyramid of deductive justifiable knowledge is a bit fuzzy in practice. However, I would continue to assert that disciplines have ideals of systemic knowledge that I describe even though academics do not achieve these ideals in practice. Elsdon-Baker challenges whether the systems of knowledge used by academics and the ordinary public stand in "stark contrast" to each other. I think I would endorse the "stark contrast" view, while recognizing that the meaning of "stark" will differ for each reader of this text.

Elsdon-Baker then adds some real pragmatic reality to my narrative, which is that participants in these debates are not operating within one institutionalized system of knowledge of a discipline but across disciplines –

some of which they may not have good knowledge of. I agree that this is the case. She also points out that most academics do not synthesize all of their knowledge into exhaustive system of deductive justification. I agree entirely. However, such hierarchy is often implicit in what they assume from their training. For example, I do not believe I have ever been taught, or have ever written out the statement "I believe that claims about society are best justified through observation." But, somehow when you get a PhD in sociology all of your closer to the ground claims assume the higher level statement – even if few PhD students could even articulate that this is the justification.

All of this raises a point that I largely avoid in the book, which is how much logical systemization of knowledge is required to produce these patterns in the data I see. What my data actually shows, upon further reflection, is that ordinary Christians in the U.S. do not have even the fuzziest, weakest of pyramids. Many of my empirical tests are simply whether those who believe in a "non-scientific" religious claim (like the earth being less than 6000 years old) agree with other scientific claims. They typically do. I actually have no data on any more coherence than that. My point is that only a theologian or philosopher would care that this most basic level of coherence is met.

Elsdon-Baker raises a separate challenge about why academics implicitly assume that the public shares their view of systemic knowledge

conflict. My mechanism – admittedly without supporting data – is what Elsdon-Baker calls projection. That is, academics just assume that the public views things as they do. Actually, my mechanism is a combination of projection and institutionalization – the latter because contemporary academics may have learned this view when it was actually correct, before the late 1960s.

However, she raises another mechanism, which is that the academics are just learning the public myths. She shows interesting data from the UK and Canada that the public believes there is conflict between religion and science, even if they themselves are not in such a conflict. I had not thought of this mechanism before, and it is plausible. To my mind it implies a feedback loop where finding the chicken and the egg will be impossible. The mechanism would be that academics and other elites teach the public that there is a systemic knowledge conflict between religion and science, the public believes this, and the next generation of academic is raised in this culture, and then reinforces this view for the next generation.

Finally, she asks where the public would get their view of religion and science. I only discuss academics as one contributor to this view, but do not discount other possible contributors. She identifies another contributor in her survey, which is the internet. I have no doubt that this is now the primary source of information on almost anything. To complicate the story further, in the book I report on an admittedly limited analysis of what

happens when you search in google for “religion and science.” Not only do you get pages that use the systemic knowledge perspective, but most of the content ultimately comes from academics. That said, investigation of religion and science on the internet is very important. I appreciate the clarifications and challenges Elsdon-Baker raises about my views of elites, and I hope that she and others can conduct investigations of this topic.

MORALS AND KNOWLEDGE

I now turn to Crick and Harris, both of whom, writing from intellectual traditions quite far from my own, suggest how my book may change the thinking outside of social science. To be flippant, the overall claim of Nathan Crick is that the book should have been titled, and taken the perspective of, “morals and knowledge,” instead of “morals not knowledge.” That is, his core claim is that I make a binary distinction in the entire book between morals and knowledge, assuming that they are fully separate phenomena, when in actuality they are not. To make my book more applicable to the contemporary world, he argues that I should not rely upon the dichotomy.

He proposes that I mix morals and knowledge as a way to further what he sees as my political goals in the book. I never write about my normative goals – a not uncommon stance among social scientists. I adhere to the old fashioned formulation attributed to Max Weber, where I use my values to select a topic to focus upon, and then I attempt to be morally neutral in my

analysis of the data. While many disagree with this stance, I conclude that discussing my own politics can confuse the issue. However, I will use Crick's comments as a springboard to discuss the motivation for the book, because it will be important below.

Crick says that my motivation is to re-describe the relationship between religion and science so as to facilitate new alliances between religion and science that will forward a common cause of fighting climate change. This is true in a narrow sense. While I am concerned about climate change, I primarily use it as an example throughout the book because it is one that the reader is familiar with and, most importantly, there is a lot of discourse in the public sphere to use as data. My substantive concerns throughout my career has been on the impact of technology applied to humans – like reproductive genetic technology – and whether the moral message that comes with this technology results in our dehumanization. (Evans 2010; Evans 2016)

But, upon further reflection, my deeper motivation for writing the book is that it is yet another continuation of my now decades-long project of trying to make sure that any debate in the public sphere, such as the one currently underway about human gene editing, is simultaneously "thick" and "thin." (Evans 2002) To massively simplify, a "thick" debate is about what values we should use to understand an issue like gene editing, and which means would be consistent with those values. (You will notice an affinity with this idea and

Crick's recommendations, of which more below). A "thin" debate is not about values per se, but about which means will most efficaciously advance taken for granted, institutionalized values. In an earlier book I showed how Christian social ethics and moral theology birthed the field now called bioethics, and earlier debates by theologians about "thick" value laden concerns like what a human should be were displaced, along with the theologians, by bioethicists. Bioethicists asked the thin question of whether gene editing maximized one of four values portrayed as universally held by American society (autonomy, beneficence, non-maleficence and justice). (Evans 2002)

For a proper debate in a liberal democratic society, we need both the thick and the thin debate. However, at least in the human technology debates on which I have focused, when the theologians moved away from these debates in the U.S., the thick debate disappeared from at least the part of the bioethics debate that impacts what actually happens with science. So, I want to publicize the fact that despite the impression one would get from the academic religion and science literature, contemporary religious Americans look at science and primarily see values, not facts. They should talk more about values in scientific activity. Moreover, the power of scientists in these debates is that they appear to not be promoting values at all, but simply facts. If people realize that they too are promoting values, perhaps this can open up the "thick" debate about science and technology

that needs to happen. Science without values in the public sphere simply reverts to “that which can be done should be done.”

Enough about my motivations. Crick’s account of my motivation is primarily to demonstrate that I need a better account of the relationship between morals and knowledge in order for my ideas to have further impact. Crick focuses on the fact that I treat knowledge and morals as a binary, portraying knowledge as emerging and being recognized independent of morals. Crick would say that in actuality they are combined. I agree.

Crick develops his case by using the views of pragmatist philosopher John Dewey and rhetorical theorist Kenneth Burke. When reading Crick’s critique, I fully recognized the perspective he is articulating. Indeed, the theoretical/epistemological part of the discipline of sociology that I inhabit is called “cultural sociology,” and it shares a similar orientation with the pragmatists. Sociologists tend to refer to similar ideas by referencing the symbolic interactionist tradition, or the social constructionist arguments of Peter Berger, which were partially built upon the ideas of George Herbert Mead. (For a typical discussion of the links between this part of sociology and pragmatism, see (Shalin 1986))

Crick writes that a pragmatic approach in my case would best be called “morality through inquiry,” and morality is dependent on what the public views the nature of the situation to be. Most critically, the pragmatist tradition would say that what are thought to be the facts or justified

knowledge in the situation will shape the moral conclusion. So would the reverse: the a-priori morals will shape what are thought to be facts.

Given that I agree with Crick, why did I write a book that uses such a stark dichotomy? First, I was essentially testing a hypothesis that is stated by others as a dichotomy. Much of the book is dedicated to demonstrating that the religion and science academic world – particularly the theologians, historians and social scientists – are focused at best on science and religion in conflict over knowledge and at worst on the claim that this conflict is over systemic knowledge.

To try to make a very strong statement that any conflict in the public between religion and science is not about knowledge, I presented the simple case of "knowledge" as portrayed by academics vs. "not knowledge" (e.g. morals). Crick is making an important suggestion in how my claims can be built upon.

The second reason is that I am engaged in high level generalization using social science data, which requires simplified theories. There is agreement among sociologists that a number of sophisticated sociological theories are "true," but they are not used to organize our data gathering or analysis because they require more fine-grained measuring tools than those that exist. Indeed, sociology has long relied upon theoretical dichotomies to be able to connect theories to inevitably messy data – structure vs. agency; structure vs. culture; public vs. private; and fact vs. value (for a list of 23 of

these, including fact vs. value, see the book literally titled “core sociological dichotomies.” (Jenks 1998)) Theorists who say that structure and agency interact in various ways, or loop back and forth with time and so forth are generally convincing, but when it comes time to design the next research project and particularly when it is time to interpret the data, one finds oneself falling back upon simplified dichotomies. Yet, as we tell our graduate students, it is important to be aware of how complicated the social situation is, even if you cannot measure it at the required level of complexity.

So, I would argue that my simplification is correct, and it is also likely that the more detailed account given by Crick is as well. Social surveys, which I relied upon heavily in the book, cannot be used to demonstrate sophisticated theoretical accounts. Possibly a case study based on ethnographic or in-depth interview data could. I hope that others pursuing this line of inquiry consider his hypothesis.

As Crick points out, if anyone is going to try to use what I have written to change the practice of religion and science, they will have to come up with a theory of a relationship between the two beyond my simplistic dichotomy. He offers one, based on the distinction between primary and secondary interpretations. Roughly, primary interpretations are “facts” – knowledge – such as “carbon dioxide produced by humans will increase the average temperature on the planet x degrees in 30 years.” Secondary interpretations are the arrangement of facts in meaningful order following

philosophies, ideologies, myths and so on. “Whatever their character, these secondary interpretations share the same function which is to embed primary interpretations within a large narrative understanding that places the facts in a dramatic relationship to action” he writes (P.22). To take a simple example of this process, not all facts are considered relevant to a particular moral decision.

I think this takes me to a more sophisticated yet analogous place. My call is for everyone to recognize that scientists have values that they use – accounting for Crick’s clarification – to organize their facts. Contemporary American religious citizens, with a few exceptions, rely upon science for their facts, but order those facts in a particular way based on their values. What Crick has given us is a way to talk to scientists that allows me to show that their fact making role is secure, but that due to the proliferation of facts and the impossibility of any normal person keeping track of all facts, they need to advocate a secondary (moral) interpretation to make sense of it all.

I will finish my discussion of Crick by focusing on what was for him, I think, an aside. On page 19 he articulates a more sophisticated version of the source of conflict between religion and science than I offer. I say “morals and not facts,” while he says that scientific knowledge changes social situations, which then require different moral solutions. Scientific knowledge is the engine of potential conflict because it unsettles taken for granted situations that have a set repertoire of moral solutions. I would say that this

only leads to moral conflict between scientists and a religious group if the religion has an inflexible, limited supply of moral solutions. This accounts for the basic feature of the history of religion and science debates, which is that the religions that view their theology and associated morality as evolving (e.g. Anglicanism) are those with the least moral conflict with science, while those who claim that their theology and associated morality have been constant for nearly 2000 years (e.g. American fundamentalist Protestantism) have the most moral conflict. This also largely accounts for Catholicism, which for the past few hundred years has largely accepted the claims of institutional science about facts of the natural world, but has moral conflict with science – perhaps because the institutions that establish its theology and associated morality are designed to change slowly.

Let's apply this to Darwin. The traditional knowledge conflict account would be that Darwin explained the origins of humans using the scientific method and the religious used interpretation of sacred texts, and thus any conflict was over knowledge. My account is that Darwin's ideas created a moral message that conflicted with the morals of various religious groups of the time. (Dawson 2007; Noll 1994, 153, 189; Shapiro 2013) Crick's account would be that the knowledge generated by Darwin unsettled a number of social situations, which then seemed to require a different repertoire of moral options. Darwin created a situation where these new facts meant that all sorts of new decisions had to be made about the relationship of humans

to animals and how humans should relate to each other. This unsettled morality, resulting in conflict. Crick's comments provide valuable insights about how to reconfigure the debate about religion and science, and I hope to pursue his ideas.

ELITES . . . AGAIN

I appreciate Mark Harris' light-hearted depiction of my use of the term "elite" by referencing a popular line from a Brexiteer. Of course, in an American university I would be most concerned with showing the similarity of my term and a similar quote from a Trumper. But, seriously, in sociology the term "elite" has no negative connotations, except for those vanishingly few who think that a society can exist without hierarchies. The term is just a description of differential roles in society, some of which come with more power than others. All societies above a very low level of complexity need elites.

Harris' insightful comments complement the other commentaries so well not only because he is bringing in a theological and scientific perspective, but because he is focused on what I am calling the elite religion and science debate. To be clear, elites have a role in any large scale social interaction, and the elites in the religion and science debate need to continue on with what they do. I am accusing the elites of not acknowledging that they are in a symbiotic relationship with "the masses"

(to take one formulation) or “the public” (which is the term I use in the book). The elites in this debate at best do not acknowledge that the public thinks differently about religion and science, and at worst imply that the public has the same view as the elites. Harris is using my book as a springboard to improve those elite debate, and I will push his suggestions a little further, undoubtedly beyond the limits of my expertise, and hope that those more qualified than I will take up the task he outlines.

Harris starts with a series of clarifications and extensions on my depiction of the elites in the religion and science debate. I will combine his first two points to acknowledge that the elite debate has perhaps always been about rejecting the idea of inherent conflict between religion and science, while also saying that Harris is right that my point was to say that elites do not “deliberately broadcast the message of conflict,” but “disseminate it nonetheless.” To go a bit further, I could also say that disseminating the message while explicitly denying it may make the message of conflict even more powerful for the public.

In his third point he enumerates the many theoretical schemes used by elites to describe the relationship between religion and science, such as those of Barbour, Gould, Stenmark and Peters. On the one hand, I am adding yet another distinction (between knowledge and morals). On the other, I hope that my other distinction – between the elites and the public – helps to make sense of this dizzying array of distinctions by demonstrating

that some are applicable to the elite debate and some to the public. By this point in my response the reader is aware that sociologists have a penchant for generalizations, so I would say that the relationships between systemic knowledge, propositional knowledge and morality would account for 90% of everything we would ever want to say about the public.

To be provocative by over-stating the case, if the goal of theological harmonizers or synthesizers was to have the religious citizens accept these syntheses, a victory has been won, so such efforts can cease. There is essentially no knowledge conflict remaining to synthesize. This is either because the synthesizers have been so effective at making clear that contemporary scientific claims are consistent with theology or, in what would be a pyrrhic victory, success has been achieved not through synthesis but by the abandonment of religious claims about nature by the laity.

I want to really expand upon Harris' fourth clarification of my statements about elites. He writes that the field of religion and science grew along with secularization of Western societies. Following Drees, he sees that disproving a "science vs. religion" conflict is the result of a need to "assert the legitimacy of religious belief in the face of scientific marginalization," and that therefore much of the elite literature has the feel of apologetics. I agree with his insight, but would add additional motivations that I see operating in the defense of religion, at least among sociologists. That impulse to say, "see, religion is not the ignorant thing you think it is" is also driven by the

desire to always be questioning the taken for granted. Others seem to be motivated by taking the side of the weaker side in a fight. And, particularly among humanistically-oriented social scientists, there is a deep seated desire to defend some glimmer of sacredness against the onslaught of the techno-rational mundane, even if the analyst does not believe all of those religious details themselves. Whatever the motivation, I agree that there is an urge in the field of religion and science to say that religion is legitimate.

Whenever the field of religion and science began, let us assume that the defense of religion meant defending it as a knowledge system, either because that was a core component of Christianity back then, or because it was scientists who got to define the terms of the dispute, and since they think of themselves as only producing knowledge, any group that conflicts with them must also be about producing knowledge. Either way, as a strategy to defend religion, defining religion as primarily concerning knowledge that can or cannot be synthesized with science will result in less religion. Science, which is the arbiter of legitimate knowledge of the natural world, defines what is legitimate about your religion, making religion a sub-set of science.

But, the response from the reader will be, “religion is about so much more than knowledge of the natural world.” Exactly, I would say, so why not bite the bullet and just remove knowledge claims about nature from theology? There are fact claims about the natural world that no scientist

cares about that happened long ago – like the Resurrection – but in the contemporary world, for anything that any scientist actually cares about, the vast majority of religions and religious people agree with. But, religion is about the meaning of facts (see Crick's critique). Sure, religion and science can disagree about the Resurrection (if science cares), but we agree on millions of other fact claims about the world. What is the meaning of these facts? If the point is to defend religion against secularization at the hand of science, this approach puts religion in the driver's seat. I acknowledge that this is letting Steven J. Gould define religion, but his concept of the non-overlapping magisteria appears to not only be advocacy, but an empirically accurate depiction of the public's view. I am sure I am unknowingly describing an approach taken in the history of Christian theology – my only point is to say that such an approach seems to be sociologically necessary.

Harris has a few additional critiques of the book, and the first of which is to question whether there really is systemic knowledge conflict among elites. Harris worries that my claim that there are two deductive and coherent knowledge systems, represented in the book by two distinct pyramids, goes to far, making the two to be distinct, "like chalk and cheese." I should have been more clear in the book about my use of generalization. The pyramids are more like ideal-types, cases which do not actually exist in the data but are a "one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and

occasionally absent concrete individual phenomena." (Weber 1949, 90) Ideal types are supposed to be chalk and cheese, and they do hide the messy reality behind them. Therefore, the only people who may truly reside in the ideal-types would be Richard Dawkins and a American Protestant Fundamentalist. Everyone else has pyramids that overlap in some way.

Finally, Harris argues that ordinary Christians do use a pyramid of deductive knowledge, like the elites do. He identifies the justificatory claim at the apex as the Incarnation ("Jesus is the Son of God") from which follow lower level beliefs. I would say that if religious people do have a deductive pyramid, it is not very tall and it is very fuzzy and disorganized, compared to that used by elites. If they had a tall, organized one this would mean that they had spent a lot of time reading or listening to Christian theology, which most ordinary Christians do not have time for.

To adjudicate this claim I will unfortunately, but with a friendly smile, use the social scientists' conversation stopper, which is: show me your data. That is, I would argue that the people Harris has encountered in churches are different from ordinary American Christians. Some sources of this difference could be that they are unusually interested in the organization of their religious knowledge (e.g. in theology). I could easily be convinced that British Christians, given that participating in religion is more of a social choice than in many parts of the U.S., are more aware of theology. I could be convinced that the Catholic and Anglican traditions that dominate the UK

are more focused on theology than are American Christian traditions. And, now for the social scientist full employment act of 2019 – I call for more research into this very question. I thank Harris for prompting me to think about some of the larger ramifications of what I have written.

I would like to again thank the four critics for their attention to my argument. Given my attempt to speak across a large range of the disciplines involved with the religion and science literature, including those who participate in the life of this journal, I have no doubt that I got many of the details wrong. I hope that the reader will see enough insight in the book to reconsider how work in religion and science proceeds.

REFERENCES CITED

Dawson, Gowan. 2007. *Darwin, literature and Victorian respectability*. Cambridge, UK: Cambridge University Press.

.Ecklund, Elaine Howard, David R. Johnson, Kirsten R.W. Matthews, Steven W. Lewis, Robert A. Thomson, and Di Di. 2019. *Secularity and science: What scientists around the world really think about religion*. New York: NY: Oxford University Press.

Efron, Noah. 2018. Jews. In *The warfare between science and religion: The idea that wouldn't die*, edited by Jeff Hardin, Ronald L. Numbers, and Ronald A. Binzley. Baltimore: Johns Hopkins University Press.

Evans, John H. 2002. *Playing God? Human Genetic Engineering and the Rationalization of Public Bioethical Debate*. Chicago, IL: University of Chicago Press.

———. 2010. *Contested Reproduction: Genetic Technologies, Religion, and Public Debate*. Chicago, IL: University of Chicago Press.

———. 2016. *What is a human? What the answers mean for human rights*. New York: NY: Oxford University Press.

Harrison, Peter. 2015. *The Territories of Science and Religion*. Chicago, IL: University of Chicago Press.

Jenks, Chris. 1998. *Core sociological dichotomies*. Thousand Oaks, CA: Sage Publications.

Noll, Mark A. 1994. *The Scandal of the evangelical mind*. Grand Rapids, MI: Eerdmans.

Shalin, Dmitri N. 1986. Pragmatism and social interactionism. *American Sociological Review* 51, no. 1: 9-29.

Shapiro, Adam R. 2013. *Trying biology: The Scopes trial, textbooks, and the antievolution movement in American schools*. Chicago, IL: University of Chicago Press.

Tinsley, Cleve, Pamela J. Prickett, and Elaine Howard Ecklund. 2019. Black Protestant views of science. *Du Bois Review* 15, no. 2: 533-46.

Weber, Max. 1949. *The Methodology of the Social Sciences*. New York: Free Press.